Gila Monster (*Heloderma suspectum*)

Species Status Statement.

Distribution

Gila monster occurs in the Mojave and Sonoran desert regions of Utah, Nevada, California, Arizona, and New Mexico, as well as several states in Mexico. In Utah the species is restricted to Washington County, where it lives on the Beaver Dam Slope, the greater St. George area, Leeds, Shivwits and Cedar Pockets Wash (Fridell et al. 1998).

Table 1. Utah counties currently occupied by this species.

Gila Monster	
WASHINGTON	

Abundance and Trends

This species was once locally abundant around Bloomington, St. George, Ivins, Santa Clara, and Washington. An intensive study conducted between 1982 and 1985 revealed a density of 20 Gila monsters per square mile in some prime habitat areas within what is now the Red Cliffs Desert Reserve (Coombs 1977, Beck 1985, Beck 1990). Historically, the best Gila monster habitat in Washington County surrounded the town of St. George (Beck 1985). Urban development has eliminated much of this former habitat, and the species is now uncommon, probably with an ongoing negative population trend in this state.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

In Utah, Gila monsters often overwinter in rocky shelters associated with sandstone or granite outcrops. During the spring and summer, individuals may migrate down into adjacent valleys and washes to forage. Substrate characteristics include basaltic lava slopes or flows, boulder fields of loose Navajo sandstone, and gravelly or sandy soils (Beck 1990). Active Gila monsters often utilize rocky canyon bottoms or washes with dry or intermittent streams (Beck 2005), and routinely use mammal and tortoise burrows for refuge from predators and heat. Home ranges can be large for Gila monsters, especially if their winter shelters are distant from their summer range, or foraging areas are far from nest sites. Travel to and from these seasonal use areas may expose the lizard to overheating, desiccation, predation, and road mortality.

Threats to the Species

Declines are primarily attributed to habitat loss, fragmentation, and degradation, predation, and human-caused mortality including road kill and illegal collection (Beck 2005). Gila monsters select use areas based on substrate structure, shelter site availability, and microhabitat components (Beck 2005). These specialized habitat requirements coupled with their life history traits make Gila monsters particularly vulnerable at the northern edge of their geographic range, as in southwestern Utah (Beck 2005). Most remaining habitat is publicly owned, and protected from commercial development, although invasive grasses and subsequent wildfires are degrading many of these areas. A substantial amount of remaining habitat is unprotected and slated for development, which will contribute to the fragmentation of protected habitat. Utah Gila monster populations are at their elevational and latitudinal limits; and as residential and recreational growth continues to expand northward, displaced populations have nowhere to go.

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

Gila Monster	
Very High	
Droughts	
Inappropriate Fire Frequency and Intensity	
Invasive Plant Species – Non-native	
Temperature Extremes	
High	
Commercial and Industrial Areas	
Housing and Urban Areas	
Improper Grazing (current)	
Roads – Transportation Network	

Rationale for Designation.

This species faces continued threats, primarily from habitat loss and degradation. It is already managed under a conservation strategy (McLuckie et al. 2007).

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to prevent ESA listing and lessen related economic impacts. An ESA listing of Gila monster could result in extensive costs to mitigate road development, urban and industrial development, and grazing in Washington County. Additionally there is a continuing need to

mitigate habitat impacts of drought, fire, and invasive plants. If the species is downlisted or delisted, continued efforts will be required to mitigate threats and maintain stronger populations.

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